

positive buoyancy, and such that the upper section(s) (1) compensate for the weight in water of the lower section(s) (2) and such that the tethers (6) have an increasing pressure resistance as the depth towards the sea-bed increases.

14.(NEW) Tether system for tension leg platforms, characterized by tethers (6) having pipes of different diameter, with a substantially continuous reduction, and an increased pressure resistance towards the sea-bed.

15.(NEW) Tether system for tension leg platforms (4) in accordance with claim 13, characterized by the tether system having a weight in water close to neutral.

16.(NEW) Tether system (6) for tension leg platforms (4) in accordance with claim 13, characterized by having decreasing buoyancy towards the seabed.

17.(NEW) Tether system for tension leg platforms (4) according to claim 13, characterized by tethers having pipes with at least two stepped reductions of the diameter towards the seabed.

18.(NEW) Tether system for tension leg platforms (4) according to claim 13, characterized by tethers having pipes with at least two stepped increases of the wall thickness towards the seabed.

19.(NEW) Tether system for tension leg platforms (4) in accordance with claim 13, characterized by having upper sections (1) with reduced wall thickness such that the total cross sectional area of the pipe wall is maintained approximately constant over the height.

20.(NEW) Tether system for tension leg platforms (4) in accordance with claim 13, characterized by having sections made of steel.

21.(NEW) Tether system for tension leg platforms (4) in accordance with claim 13, characterized by having sections made of composite materials.

22.(NEW) Use of tethers (6) having upper and lower pipe sections (1, 2), and a stepped reduction of the diameter towards the seabed such that the upper section(s) (1) have positive buoyancy, and such that the upper section(s) (1) compensate for the weight in water of the lower section(s) (2) and such that the tethers (6) has an increasing pressure resistance as the depth towards the sea-bed increase at deep-sea installations.

23.(NEW) Tether system for tension leg platforms (4) in accordance with claim 15, characterized by the tether system having a weight in water close to neutral.

24.(NEW) Tether system (6) for tension leg platforms (4) in accordance with claim 15, characterized by having decreasing buoyancy towards the seabed.

25.(NEW) Tether system for tension leg platforms (4) in accordance with claim 15, characterized by having upper sections (1) with reduced wall thickness such that the total cross sectional area of the pipe wall is maintained approximately constant over the height.

26.(NEW) Tether system for tension leg platforms (4) in accordance with claim 15, characterized by having sections made of steel.

27.(NEW) Tether system for tension leg platforms (4) in accordance with claim 15, characterized by having sections made of composite materials.